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EXAMINER	
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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/632,957	NAMIZUKA, YOSHIYUKI	
	Examiner	Art Unit	
	Chad Dickerson	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/4/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

- On page 2, lines 22: the phrase "MPF" is suggested to be changed to -- MFP --.
- On page 2, line 23: the phrase "A facsimile control unit (FCC)" is suggested to be changed to -- A facsimile control unit (FCU) --.

Appropriate correction is required.

Claim Objections

2. Claims 23 and 28 are objected to because of the following informalities:

Re claim 23: on lines 8 and 9, the phrases "the write image processing device" and "the supervising device" is suggested to be changed to -- a write image processing device -- and -- a supervising device --.

Re claim 28: on line 5, the phrase "the data transferring device" is suggested to be changed to -- a data transferring device --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 24-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claim 24: The claim lists a computer program product, but the claim excludes the proper physical elements for it to be considered as a computer program product. Stated in MPEP 2106.01, *"When a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personal should treat the claim as a product claim"*. Therefore, the Examiner suggests that the claim 24 reflect the above statement of the MPEP and have a readable medium encoded with a computer program. The dependent claims 25-29 are also rejected because of their dependency. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 8, 10, 21, 23 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 8: the phrase "a type of the data" on line 4 of the claim renders the claim indefinite. Does the word "data" refer to image data that is communicated above or control commands that are considered data? The claim will be given the broadest reasonable interpretation. Claim 10 is also rejected because of its dependence.

Re claim 21: the phrase "a type of the data" on line 4 of the claim renders the claim indefinite. Does the word "data" refer to image data that is communicated above or

control commands that are considered data? The claim will be given the broadest reasonable interpretation. Claim 23 is also rejected because of its dependence.

Re claim 28: the phrase "a type of the data" on line 4 of the claim renders the claim indefinite. Does the word "data" refer to image data that is communicated above or control commands that are considered data? The claim will be given the broadest reasonable interpretation.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 4, 6, 8, 11-14, 17, 19-21, 24 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi '194 (JP Pub No 2001270194).

Re claim 1: Kobayashi '194 discloses an image forming apparatus, comprising:

an image reading device configured to read an image of an original document (i.e. Kobayashi '194 discloses an image forming device that serves as a copier that is able to copy documents that are read by the system's scanner. In the description of the prior art, a copier is mentioned to perform the feature of reading, or scanning, an image of a document; see fig. 4; paragraphs [0002]-[0008]);

an image forming device configured to form an image on a sheet in accordance with image data read by the image reading device (i.e. in an image forming device, it is conventional to have this type of device to from an image on a sheet in accordance to an image scanned in the forming device. Since the prior art is able to expand the functionality of the device by adding a printer, the function of printing a document that has been scanned into the system by the scanner it performed; see fig. 4; paragraphs [0002]-[0008]);

an operation unit connecting device configured to detachably connect an operation unit, said operation unit being configured to accept inputting of operational instructions operating the image forming apparatus (i.e. it is conventional to have a operation unit, that is able to have instructions entered on the operation unit, have a connecting device that connects the operation unit to the system the entered instructions are used to control. Like mentioned in applicant's specification regarding the background of the invention, a connection to a bus (whether serial or parallel) within a system involves some type of connection to communicate with a system's main CPU. This connection can be comprised of a USB or an SCSI connection device; see figs. 2 and 4; paragraphs [0002]-[0008] and [0020]-[0022]);

a process controller configured to control an operation of the image forming apparatus (i.e. when viewing drawing 4, the CPU (102) contained in the main control device (101) is considered as the process controller since it is configured to control the operation of the image forming apparatus by the commands stored in the ROM (103); see figs. 1 and 4; paragraphs [0002]-[0008]); and

an expansion unit connecting device configured to connect an additionally attachable expansion unit (i.e. in the conventional described in Kobayashi '194, a connecting means is used to connect the external device, which is considered as the expansion device, to the image forming apparatus. The connecting means is used to connect additionally attachable external devices, such as a fax, scanner or printer, to the image forming device; see figs. 1 and 4; paragraphs [0002]-[0008] and [0013]-[0020]), said expansion unit connecting device including an expansion control device configured to allocate the image reading device or the image forming device to a job (i.e. when the external device used to expand the image forming device is detected to be connected, the system gives the external device connected control over the CPU in the main in the image forming device. When the external devices are detected to be connected, the external devices are passed the control of the image forming apparatus by the control pass change section; see fig. 4; paragraphs [0017]-[0024]), wherein said process controller controls the operation unit to operate (i.e. in the system of Kobayashi '194, both the CPU (702) of the image forming device and the Fax unit (713) are able to control the LCD and an extension change key on the LCD. In the conventional system, when the CPU (102) wants to change information available on the display (112), the CPU (102) develops data and places data on the display to reflect changes in the system. The CPU (102) controls the data available on the display of the operation unit and controls the input commands input in the operation unit to be performed in the image forming device; see figs. 2-3; paragraphs [0002]-[0008] and [0017]-[0024]) and receives a control command from the expansion control device to perform image

formation (i.e. in the system of Kobayashi '194, when the external device control unit control, the control of the extension function and the basic functions of the copy machine can be performed; see figs. 1, 3 and 4; paragraphs [0017]-[0024]).

Re claim 2: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming apparatus according to claim 1, wherein said process controller includes, a memory configured to store at least two control programs for controlling the image forming apparatus (i.e. in the embodiment of the invention, the control of the image forming apparatus is changed by the control pass change section that changes control back and forth from the external connected device to the copy machine CPU (402). With this function, a program is needed to signify when the proper time to switch control of the copy machine. The ROM (103), like the conventional, is used in the system of drawing 3. The ROM is used to store the control program of the image forming machine with the external device, when the device is connected in order to reduce ROM capacity; see figs. 1 and 4; paragraphs [0017]-[0024]), an extension unit detecting device configured to detect a presence of connection of the additionally attached expansion unit (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]), and a control program selecting device configured to select an applicable control program to be used by the process controller in accordance with the detection result of the extension unit

detecting device (i.e. the control pass change section of the invention performs the feature of passing control to the CPU of the copy machine or the external device connected to the copy machine. This performs the feature of choosing the control program to use in controlling the system of the copy machine and other external devices connected; see paragraphs [0008]-[0013]).

Re claim 4: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming apparatus according to claim 2, wherein said extension unit detecting device detects the presence of connection of the additionally attached expansion unit by determining if any unit is connected to the expansion unit connecting device (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]).

Re claim 6: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming apparatus according to claim 2, wherein said extension unit detecting device detects the presence of the connection of the additionally attached expansion unit by determining that the additionally attached expansion unit is connected when the operation unit is not connected to the operation

unit connecting device (i.e. in one of the problems to be solved, in order to raise the basic functionality of the copy machine, the copy machine either has an LCD connected to the machine itself, or the expansion device has an operation unit that can control the copy machine. The copy machine can have an external device connected and can recognize this connection through the connection means when an LCD is not connected to the copier itself. This performs the feature of having an external device connected with an operation unit itself and a regular operation unit alone not being connected to the copier to control the device; see paragraphs [0013]-[0024]), and by determining that the additionally attached expansion unit is not connected when the operation unit is connected to the operation unit connecting device (i.e. the operation unit can be detected to be connected to the copier if an external device is not connected and this will allow for the operation unit to control the device since no other control programs are needed due to the absence of an external device; see paragraphs [0013]-[0024]).

Re claim 8: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming apparatus according to claim 1, wherein the expansion unit connecting device includes a data transferring device configured to communicate image data and control commands with the additionally attached expansion unit (i.e. UARTs used in Kobayashi '194, are used to communicate image data and control commands to and from the external devices connected to the copy machine. The UARTs can be considered to be the data transferring devices; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]), and a bus selecting device

configured to select a data transfer destination in accordance with a type of the data received by the data transferring device (i.e. the control line (716) can be considered as the bus selecting device since this is used to transfer data that may be designated to the printer to be sent to the UART handling communications with the printer and print data; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]).

Re claim 11: Kobayashi '194 discloses an image forming apparatus, comprising:

an image forming apparatus including an image reading device configured to read an image of an original document (i.e. Kobayashi '194 discloses an image forming device that serves as a copier that is able to copy documents that are read by the system's scanner. In the description of the prior art, a copier is mentioned to perform the feature of reading, or scanning, an image of a document; see fig. 4; paragraphs [0002]-[0008]), an image forming device configured to form an image on a sheet in accordance with image data read by the image reading device (i.e. in an image forming device, it is conventional to have this type of device to from an image on a sheet in accordance to an image scanned in the forming device. Since the prior art is able to expand the functionality of the device by adding a printer, the function of printing a document that has been scanned into the system by the scanner it performed; see fig. 4; paragraphs [0002]-[0008]), an operation unit connecting device configured to detachably connect an operation unit, said operation unit being configured to accept inputting of operational instructions operating the image forming apparatus (i.e. it is conventional to have a operation unit, that is able to have instructions entered on the

operation unit, have a connecting device that connects the operation unit to the system the entered instructions are used to control. Like mentioned in applicant's specification regarding the background of the invention, a connection to a bus (whether serial or parallel) within a system involves some type of connection to communicate with a system's main CPU. This connection can be comprised of a USB or an SCSI connection device; see figs. 2 and 4; paragraphs [0002]-[0008] and [0020]-[0022]),

a process controller configured to control an operation of the image forming apparatus (i.e. when viewing drawing 4, the CPU (102) contained in the main control device (101) is considered as the process controller since it is configured to control the operation of the image forming apparatus by the commands stored in the ROM (103); see figs. 1 and 4; paragraphs [0002]-[0008]); and

an expansion unit connecting device configured to connect an additionally attachable expansion unit (i.e. in the conventional described in Kobayashi '194, a connecting means is used to connect the external device, which is considered as the expansion device, to the image forming apparatus. The connecting means is used to connect additionally attachable external devices, such as a fax, scanner or printer, to the image forming device; see figs. 1 and 4; paragraphs [0002]-[0008] and [0013]-[0020]), said expansion unit connecting device including an expansion control device configured to allocate the image reading device or the image forming device to a job (i.e. when the external device used to expand the image forming device is detected to be connected, the system gives the external device connected control over the CPU in the main in the image forming device. When the external devices are detected to be

connected, the external devices are passed the control of the image forming apparatus by the control pass change section; see fig. 4; paragraphs [0017]-[0024]), wherein said process controller controls the operation unit to operate (i.e. in the system of Kobayashi '194, both the CPU (702) of the image forming device and the Fax unit (713) are able to control the LCD and an extension change key on the LCD. In the conventional system, when the CPU (102) wants to change information available on the display (112), the CPU (102) develops data and places data on the display to reflect changes in the system. The CPU (102) controls the data available on the display of the operation unit and controls the input commands input in the operation unit to be performed in the image forming device; see figs. 2-3; paragraphs [0002]-[0008] and [0017]-[0024]),

wherein said process controller controls the operation unit to operate and receives a control command from the expansion control device to perform image formation (i.e. in the system of Kobayashi '194, when the external device control unit control, the control of the extension function and the basic functions of the copy machine can be performed; see figs. 1, 3 and 4; paragraphs [0017]-[0024]).

Re claim 12: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming system according to claim 11, wherein said operation unit is connected to the expansion unit connecting device, said expansion control device of the expansion unit connecting device includes a first control device configured to control an operation of the operation unit (i.e. in Kobayashi '194, the expansion unit is able to have an operation unit of its own in order to control the image

forming apparatus. This operating unit for the specific expansion device controls the specific function being expanded on the image forming apparatus. Once the control unit is added to the expansion unit through the connecting means, the control unit, analogous to an operation unit, controls the specific expansion device's function; see paragraphs [0009]-[0017]), said process controller of the image forming apparatus includes a second control device configured to control an operation of the operation unit (i.e. in the system, an operation unit can be connected to the copier, or image forming device itself and the control of the device can come from the connected operation unit, without the expansion device; see paragraphs [0009]-[0017]), and said image forming system further includes an operation selecting device configured to select one of the first and second control devices (i.e. the control pass change section is able to change the control of the image forming apparatus from either the expansion device or the image forming device with an installed operation unit. With this changing the control of the copier, this performs the feature of selecting control between the two devices; see paragraphs [0009]-[0024]).

Re claim 13: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming system according to claim 12, wherein said operation selecting device selects one of the first and second devices in accordance with a processing load on the expansion control device (i.e. the control is changed to the device which produces the less ROM capacity to run in the system. Since both operating units of the image forming device and an expansion device would cause a lot

of ROM capacity to be wasted, the system chooses the expansion device if the function of the expansion device is desired. If the function of the expansion device is not desired, the control will be passed to the operation unit on the image forming device since, the expansion unit may not be connected at that time and is limited in what it controls; see paragraphs [0009]-[0024]).

Re claim 14: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming system according to claim 12, wherein said additionally attached expansion unit is configured to engage with at least one function adding unit, said at least one function adding unit adding at least one function to the image forming system under control of the expansion control device (i.e. the external devices added to the system are considered as expansion devices that add a function to the image forming apparatus. The external device not only adds a function to the image forming apparatus when added to the machine, but it also has a control unit, considered as an operation unit, that allows for the control of the image forming apparatus by the external device; see paragraphs [0009]-[0024]), and said operation selecting device selects one of the first and second devices in accordance with a number of function adding units connected to the additionally attached expansion unit (i.e. when viewing figure 2, when an external device is connected to add a functionality, the option of choosing that function to be performed is offered on the LCD. This allows a user to select one of the many devices connected to add other functions to the image forming apparatus; see paragraphs [0009]-[0017]).

Re claim 17: Kobayashi '194 discloses an image forming apparatus, and said method comprising:

storing at least one control program in a memory, said at least one control program being used by the process controller to control an operation of the image forming apparatus (i.e. the ROM (103) in the conventional stores control information pertaining to the CPU (102) and the main control strip (101) that controls the whole of the image forming apparatus. The program stored on the ROM is used to control the image forming apparatus by using the CPU (102), considered analogous to the process controller; see fig. 4; paragraphs [0001]-[0011]);

detecting a presence of connection of the additionally attached expansion unit (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]);

selecting a control program used by the process controller in accordance with a detection result (i.e. the control pass change section of the invention performs the feature of passing control to the CPU of the copy machine or the external device connected to the copy machine. This performs the feature of choosing the control program to use in controlling the system of the copy machine and other external devices connected; see paragraphs [0008]-[0013]); and

controlling the image forming apparatus using the selected control program (i.e. once the control change pass section changes control within the system, the image forming apparatus is controlled by an operation unit or an external device with an operation unit. The control change pass section selects a manner of control of the apparatus through the programs stored on the apparatus's ROM and the detection result; see paragraphs [0008]-[0013]).

Re claim 19: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the method according to claim 17, wherein said detection step detects the presence of connection of the additionally attached expansion unit by determining if any unit is connected to the expansion unit connecting device (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]).

Re claim 20: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the method according to claim 17, wherein said detection step detects the presence of the connection of the additionally attached expansion unit by determining that the additionally attached expansion unit is connected when the operation unit is not connected to the operation unit connecting device (i.e. in one of the

problems to be solved, in order to raise the basic functionality of the copy machine, the copy machine either has an LCD connected to the machine itself, or the expansion device has an operation unit that can control the copy machine. The copy machine can have an external device connected and can recognize this connection through the connection means when an LCD is not connected to the copier itself. This performs the feature of having an external device connected with an operation unit itself and a regular operation unit alone not being connected to the copier to control the device; see paragraphs [0013]-[0024]), and by determining that the additionally attached expansion unit is not connected when the operation unit is connected to the operation unit connecting device (i.e. the operation unit can be detected to be connected to the copier if an external device is not connected and this will allow for the operation unit to control the device since no other control programs are needed due to the absence of an external device; see paragraphs [0013]-[0024]).

Re claim 21: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the method according to claim 17, wherein the expansion unit connecting device includes a data transferring device configured to communicate image data and control commands with the additionally attached expansion unit (i.e. UARTs used in Kobayashi '194, are used to communicate image data and control commands to and from the external devices connected to the copy machine. The UARTs can be considered to be the data transferring devices; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]), and a bus selecting device configured to select a data transfer

destination in accordance with a type of the data received by the data transferring device (i.e. the control line (716) can be considered as the bus selecting device since this is used to transfer data that may be designated to the printer to be sent to the UART handling communications with the printer and print data; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]).

Re claim 24: Kobayashi '194 discloses an image forming apparatus, and said computer program product comprising:

a first computer code configured to store at least one control program in a memory, said at least one control program being used by the process controller to control an operation of the image forming apparatus (i.e. the ROM (103) in the conventional stores control information pertaining to the CPU (102) and the main control strip (101) that controls the whole of the image forming apparatus. The program stored on the ROM is used to control the image forming apparatus by using the CPU (102), considered analogous to the process controller; see fig. 4; paragraphs [0001]-[0011]);

a second computer code to detect a presence of connection of the additionally attached expansion unit (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]);

a third computer code configured to select a control program used by the process

controller in accordance with a detection result (i.e. the control pass change section of the invention performs the feature of passing control to the CPU of the copy machine or the external device connected to the copy machine. This performs the feature of choosing the control program to use in controlling the system of the copy machine and other external devices connected; see paragraphs [0008]-[0013]); and

a fourth computer code to control the image forming apparatus using the selected control program (i.e. once the control change pass section changes control within the system, the image forming apparatus is controlled by an operation unit or an external device with an operation unit. The control change pass section selects a manner of control of the apparatus through the programs stored on the apparatus's ROM and the detection result; see paragraphs [0008]-[0013]).

Re claim 26: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the computer program product according to claim 24, wherein said second computer code detects the presence of connection of the additionally attached expansion unit by determining if any unit is connected to the expansion unit connecting device (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]).

Re claim 27: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the computer program product according to claim 24, wherein the second computer code detects the presence of the connection of the additionally attached expansion unit by determining that the additionally attached expansion unit is connected when the operation unit is not connected to the operation unit connecting device (i.e. in one of the problems to be solved, in order to raise the basic functionality of the copy machine, the copy machine either has an LCD connected to the machine itself, or the expansion device has an operation unit that can control the copy machine. The copy machine can have an external device connected and can recognize this connection through the connection means when an LCD is not connected to the copier itself. This performs the feature of having an external device connected with an operation unit itself and a regular operation unit alone not being connected to the copier to control the device; see paragraphs [0013]-[0024]), and by determining that the additionally attached expansion unit is not connected when the operation unit is connected to the operation unit connecting device (i.e. the operation unit can be detected to be connected to the copier if an external device is not connected and this will allow for the operation unit to control the device since no other control programs are needed due to the absence of an external device; see paragraphs [0013]-[0024]).

Re claim 28: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the computer program product according to claim 24, wherein the expansion unit connecting device includes a fifth computer code configured to

communicate image data and control commands with the additionally attached expansion unit (i.e. UARTs used in Kobayashi '194, are used to communicate image data and control commands to and from the external devices connected to the copy machine. The UARTs can be considered to be the data transferring devices; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]), and a sixth computer code configured to select a data transfer destination in accordance with a type of the data received by the data transferring device (i.e. the control line (716) can be considered as the bus selecting device since this is used to transfer data that may be designated to the printer to be sent to the UART handling communications with the printer and print data; see figs. 1,3-5; paragraphs [0001]-[0008] and [0017]-[0024]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 3, 5, 7, 16, 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '194 in view of Kajita '972 (JP Pub No 2001217972).

Re claim 3: The teachings of Kobayashi "194 are disclosed above.

Kobayashi '194 discloses the image forming apparatus according to claim 1, further comprising:

an extension unit detecting device configured to detect a presence of connection

of the additionally attached expansion unit (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]); and

However, Kobayashi '194 fails to teach a power saving mode setting device configured to set a power saving mode to the image forming apparatus, wherein said power saving mode setting device determines sections of the image forming apparatus to operate under the power saving mode in accordance with the detection result of the extension unit detecting device.

However, this is well known in the art as evidenced by Kajita '972. Kajita '972 discloses a power saving mode setting device configured to set a power saving mode to the image forming apparatus (i.e. in the system, the image forming apparatus has an electric power supply that is configured to only supply energy to certain parts of the apparatus, such as the processor that controls the functions of the equipment in the image forming apparatus. When the apparatus is in standby mode, or the first standby condition, the apparatus uses a smaller power consumption than when operating in a normal mode; see paragraphs 0008]-[0041]), wherein said power saving mode setting device determines sections of the image forming apparatus to operate under the power saving mode in accordance with the detection result of the extension unit detecting device (i.e. when an extension device is detected in the system, a different power-saving mode is setup. When different extension devices are connected, different parts of the apparatus are operated in the method where useless power consumption is

prevented. When a certain extension device is detected, that equipment is initialized, but if no extension device is detected, the copy machine is continued in sleep mode to conserve energy; see paragraphs [0043]-[0053]).

Therefore, in view of Kajita '972, it would have been obvious to one of ordinary skill at the time the invention was made to have a power saving mode setting device configured to set a power saving mode to the image forming apparatus, wherein said power saving mode setting device determines sections of the image forming apparatus to operate under the power saving mode in accordance with the detection result of the extension unit detecting device in order to determine if an apparatus stays in a sleep or power conserving mode, based on the detection result of external factors (as stated in Kajita '972 paragraph [0053]).

Re claim 5: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the image forming apparatus according to claim 3, wherein said extension unit detecting device detects the presence of connection of the additionally attached expansion unit by determining if any unit is connected to the expansion unit connecting device (i.e. a connection detecting means is used to detect whether the copy machine is connected to an external device. Determining if an external device is connected to a connecting means performs the detection of the presence of the connection. This performs the feature of detecting the presence of the external device additionally attached to the copier; see figs. 1 and 4; paragraphs [0017]-[0024]).

Re claim 7: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the image forming apparatus according to claim 3, wherein said extension unit detecting device detects the presence of the connection of the additionally attached expansion unit by determining that the additionally attached expansion unit is connected when the operation unit is not connected to the operation unit connecting device (i.e. in one of the problems to be solved, in order to raise the basic functionality of the copy machine, the copy machine either has an LCD connected to the machine itself, or the expansion device has an operation unit that can control the copy machine. The copy machine can have an external device connected and can recognize this connection through the connection means when an LCD is not connected to the copier itself. This performs the feature of having an external device connected with an operation unit itself and a regular operation unit alone not being connected to the copier to control the device; see paragraphs [0013]-[0024]), and by determining that the additionally attached expansion unit is not connected when the operation unit is connected to the operation unit connecting device (i.e. the operation unit can be detected to be connected to the copier if an external device is not connected and this will allow for the operation unit to control the device since no other control programs are needed due to the absence of an external device; see paragraphs [0013]-[0024]).

Re claim 16: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the image forming system according to claim 11, wherein said

expansion control device controls the additionally attached expansion unit (i.e. the control unit on the external device, considered as the expansion device, is used to control the external device's operations. The control unit control is passed to the control unit of the external device when connected; see paragraphs [009]-[0024]).

However, Kobayashi '194 fails to teach only when power is to be supplied to the expansion unit connecting device.

However, this is well known in the art as evidenced by Kajita '972. Kajita '972 discloses only when power is to be supplied to the expansion unit connecting device (i.e. in Kajita '972, the expansion unit is supplied power when it is being operated and is not in standby mode. When the expansion unit is not in operation the standby condition in relation to the image forming apparatus is continued until the connection to the apparatus is detected; see paragraphs [0001]-[0019]).

Therefore, in view of Kajita '972, it would have been obvious to one of ordinary skill at the time the invention was made to expansion control device controls the additionally attached expansion unit only when power is to be supplied to the expansion unit connecting device in order to offer a power supply setup when adding an extension unit (as stated in Kajita '972 paragraph [0008]).

Re claim 18: The teachings of Kobayashi '194 are disclosed above.

However, Kobayashi '194 fails to teach the method according to claim 17, further comprising: setting a power saving mode to the image forming apparatus, wherein the setting step determines sections of the image forming apparatus to operate under the

power saving mode in accordance the detection result.

However, this is well known in the art as evidenced by Kajita '972. Kajita '972 discloses setting a power saving mode to the image forming apparatus (i.e. in the system, the image forming apparatus has an electric power supply that is configured to only supply energy to certain parts of the apparatus, such as the processor that controls the functions of the equipment in the image forming apparatus. When the apparatus is in standby mode, or the first standby condition, the apparatus uses a smaller power consumption than when operating in a normal mode; see paragraphs 0008]-[0041]), wherein the setting step determines sections of the image forming apparatus to operate under the power saving mode in accordance the detection result (i.e. when an extension device is detected in the system, a different power-saving mode is setup. When different extension devices are connected, different parts of the apparatus are operated in the method where useless power consumption is prevented. When a certain extension device is detected, that equipment is initialized, but if no extension device is detected, the copy machine is continued in sleep mode to conserve energy; see paragraphs [0043]-[0053]).

Therefore, in view of Kajita '972, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of setting a power saving mode to the image forming apparatus, wherein the setting step determines sections of the image forming apparatus to operate under the power saving mode in accordance the detection result in order to determine if an apparatus stays in a sleep or power conserving mode, based on the detection result of external factors (as stated in

Kajita '972 paragraph [0053]).

Re claim 25: The teachings of Kobayashi '194 are disclosed above.

However, Kobayashi '194 fails to teach the computer program product according to claim 24, further comprising: a fifth computer code configured to set a power saving mode to the image forming apparatus, wherein the fifth computer code determines sections of the image forming apparatus to operate under the power saving mode in accordance the detection result.

However, this is well known in the art as evidenced by Kajita '972. Kajita '972 discloses a fifth computer code configured to set a power saving mode to the image forming apparatus (i.e. in the system, the image forming apparatus has an electric power supply that is configured to only supply energy to certain parts of the apparatus, such as the processor that controls the functions of the equipment in the image forming apparatus. When the apparatus is in standby mode, or the first standby condition, the apparatus uses a smaller power consumption than when operating in a normal mode; see paragraphs 0008]-[0041]), wherein the fifth computer code determines sections of the image forming apparatus to operate under the power saving mode in accordance with the detection result of the extension unit detecting device (i.e. when an extension device is detected in the system, a different power-saving mode is setup. When different extension devices are connected, different parts of the apparatus are operated in the method where useless power consumption is prevented. When a certain extension device is detected, that equipment is initialized, but if no extension device is

detected, the copy machine is continued in sleep mode to conserve energy; see paragraphs [0043]-[0053]).

Therefore, in view of Kajita '972, it would have been obvious to one of ordinary skill at the time the invention was made to have a fifth computer code configured to set a power saving mode to the image forming apparatus, wherein the fifth computer code determines sections of the image forming apparatus to operate under the power saving mode in accordance with the detection result of the extension unit detecting device in order to determine if an apparatus stays in a sleep or power conserving mode, based on the detection result of external factors (as stated in Kajita '972 paragraph [0053]).

7. Claims 9, 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '194 in view of Yamakawa '595 (US Pat No 5892595).

Re claim 9: The teachings of Kobayashi '194 are disclosed above.
The image forming apparatus according to claim 1, wherein the image reading device includes a contact image sensor (i.e. in Kobayashi '194, a scanning unit is used to scan a document. It is conventional for a scanner to use an image sensor to scan a document to develop an image from the scanned document. Although Kobayashi '194 does not specifically disclose having a contact image sensor, the feature of having an image sensor to scan a document is performed by Kobayashi "194; see paragraphs [0005]-[0024]).

However, Kobayashi '194 fails to teach said image forming apparatus includes a

color identification data adding device configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component.

However, this is well known in the art as evidenced by Yamakawa '595. Yamakawa '595 discloses said image forming apparatus includes a color identification data adding device configured to add color identification data to image data read by the contact image sensor (i.e. when image data is read by the sensors used in Yamakawa '595, color component values of each picture element of the image data is added to the output of the data. This is performed in the conventional R, G and B scanning system; see col. 1, lines 21-49), said color identification data indicating a location and color component (i.e. when the scanning of the pixels are being performed, the positions of the color component values of each picture element is output by the image sensors to the image processing system. This performs the feature of having a location and a color component of image data; see col. 1, lines 21-49).

Therefore, in view of Yamakawa '595, it would have been obvious to one of ordinary skill at the time the invention was made to have the image forming apparatus includes a color identification data adding device configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component in order to read image data of an original and output color component values related to the positions of the pixels (as stated in Yamakawa '595 col. 1, lines 21-49).

Re claim 22: The teachings of Kobayashi '194 are disclosed above. Kobayashi '194 discloses the method according to claim 17, wherein the image reading device includes a contact image sensor (i.e. in Kobayashi '194, a scanning unit is used to scan a document. It is conventional for a scanner to use an image sensor to scan a document to develop an image from the scanned document. Although Kobayashi '194 does not specifically disclose having a contact image sensor, the feature of having an image sensor to scan a document is performed by Kobayashi "194; see paragraphs [0005]-[0024]).

However, Kobayashi '194 fails to teach said image forming apparatus includes a color identification data adding device configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component.

However, this is well known in the art as evidenced by Yamakawa '595. Yamakawa '595 discloses said image forming apparatus includes a color identification data adding device configured to add color identification data to image data read by the contact image sensor (i.e. when image data is read by the sensors used in Yamakawa '595, color component values of each picture element of the image data is added to the output of the data. This is performed in the conventional R, G and B scanning system; see col. 1, lines 21-49), said color identification data indicating a location and color component (i.e. when the scanning of the pixels are being performed, the positions of the color component values of each picture element is output by the image sensors to the image processing system. This performs the feature of having a location and a color

component of image data; see col. 1, lines 21-49).

Therefore, in view of Yamakawa '595, it would have been obvious to one of ordinary skill at the time the invention was made to have the image forming apparatus includes a color identification data adding device configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component in order to read image data of an original and output color component values related to the positions of the pixels (as stated in Yamakawa '595 col. 1, lines 21-49).

Re claim 29: The teachings of Kobayashi '194 are disclosed above.
Kobayashi '194 discloses the computer program product according to claim 24, wherein the image reading device includes a contact image sensor (i.e. in Kobayashi '194, a scanning unit is used to scan a document. It is conventional for a scanner to use an image sensor to scan a document to develop an image from the scanned document. Although Kobayashi '194 does not specifically disclose having a contact image sensor, the feature of having an image sensor to scan a document is performed by Kobayashi "194; see paragraphs [0005]-[0024]).

However, Kobayashi '194 fails to teach said image forming apparatus includes a fifth computer code configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component.

However, this is well known in the art as evidenced by Yamakawa '595.

Yamakawa '595 discloses said image forming apparatus includes a fifth computer code configured add color identification data to image data read by the contact image sensor (i.e. when image data is read by the sensors used in Yamakawa '595, color component values of each picture element of the image data is added to the output of the data. This is performed in the conventional R, G and B scanning system; see col. 1, lines 21-49), said color identification data indicating a location and color component (i.e. when the scanning of the pixels are being performed, the positions of the color component values of each picture element is output by the image sensors to the image processing system. This performs the feature of having a location and a color component of image data; see col. 1, lines 21-49).

Therefore, in view of Yamakawa '595, it would have been obvious to one of ordinary skill at the time the invention was made to have the image forming apparatus includes a fifth computer code configured to add color identification data to image data read by the contact image sensor, said color identification data indicating a location and color component in order to read image data of an original and output color component values related to the positions of the pixels (as stated in Yamakawa '595 col. 1, lines 21-49).

8. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '194 in view of Oteki '429 (US Pub No 2001/0019429).

Re claim 10: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the image forming apparatus according to claim 8, further

comprising:

a supervising device configured to supervise data input and output to and from the process controller (i.e. the control change pass section (416) of Kobayashi '194 supervises the information that is input and output from the CPU in the image forming apparatus and the section decides whether to give control to the different external devices that are connected or to give control to the CPU. This performs the feature of supervising the inputs and outputs of the system since these inputs and outputs have to be managed in order to determine other processing in the system; see figs. 1 and 3; paragraphs [0009]-[0024]), wherein said expansion unit connecting device includes a bus configured to communicate data and a bus interface for the bus (i.e. the UART, considered as the expansion unit connecting device is configured to communicate data to the bus (716) in the system. The bus (716) has a bus interface in order to be used to communicate information through the bus to other parts of the image forming apparatus; see figs. 1 and 3; paragraphs [0009]-[0024]).

However, Kobayashi '194 fails to teach a read image data processing device configured to apply image processing to image data read by the image reading device; a write image data processing device configured to convert the image data into a signal driving the image forming apparatus and configured to apply image processing to the signal required along with the converting process; and wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip.

However, this is well known in the art as evidenced by Oteki '429. Oteki '429

discloses

a read image data processing device configured to apply image processing to image data read by the image reading device (i.e. Oteki '429 discloses a image data control unit (100) that applies processing to an image that has been read into the system by an image reading unit (101); see fig. 1; paragraphs [0052]-[0064]);

a write image data processing device configured to convert the image data into a signal driving the image forming apparatus and configured to apply image processing to the signal required along with the converting process (i.e. the image data control unit (100) also converts the data into serial or parallel data in order to be used by the image writing unit (104) to drive the output of the image writing unit. This unit interfaces with the image processing and reading units to apply the appropriate image compression/decompression, scaling and format conversion to the image data in order to make the data more suitable for the image writing unit for output processing; see fig. 1; paragraphs [0052]-[0102]); and

wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip (i.e. the image data control unit can also perform the supervision of the data since it monitors the input and output of data into itself and the input and output of the data in the reading and writing units. The image data control unit performs processing to the image data read and converts the data in order to make the data appropriate for the image writing unit. Therefore, the image data control unit performs the feature of the read and write image processing device. With the image

data controller (203) acting as the image data control unit, the controller (203) communicates with both a serial and parallel bus. At different times, information is received from each bus and there is a device that performs the feature of selecting which bus to accept information from and to transmit information through. This performs the bus interface and bus selecting device feature. With all of these features on the image data controller (203) then it is understood that since one component performs all these features, that one controller is one microprocessor which is comprised of one chip; see figs. 1,2 and 4; paragraphs [0052]-[0127]).

Therefore, in view of Oteki '429, it would have been obvious to one of ordinary skill at the time the invention was made to have a read image data processing device configured to apply image processing to image data read by the image reading device, a write image data processing device configured to convert the image data into a signal driving the image forming apparatus and configured to apply image processing to the signal required along with the converting process and wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip in order to have the size of a processing circuit be reduced in an image processing apparatus (as stated in Oteki '429 paragraph [0024]).

Re claim 23: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the method according to claim 21, further comprising:

supervising data input and output to and from the process controller (i.e. the

control change pass section (416) of Kobayashi '194 supervises the information that is input and output from the CPU in the image forming apparatus and the section decides whether to give control to the different external devices that are connected or to give control to the CPU. This performs the feature of supervising the inputs and outputs of the system since these inputs and outputs have to be managed in order to determine other processing in the system; see figs. 1 and 3; paragraphs [0009]-[0024]), wherein said expansion unit connecting device includes a bus configured to communicate data and a bus interface for the bus (i.e. the UART, considered as the expansion unit connecting device is configured to communicate data to the bus (716) in the system. The bus (716) has a bus interface in order to be used to communicate information through the bus to other parts of the image forming apparatus; see figs. 1 and 3; paragraphs [0009]-[0024])

However, Kobayashi '194 fails to teach applying image processing to image data read by the image reading device; converting the image data into a signal driving the image forming apparatus and applying image processing to the signal necessitated along with the converting process; and wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip.

However, this is well known in the art as evidenced by Oteki '429. Oteki '429 discloses applying image processing to image data read by the image reading device (i.e. Oteki '429 discloses a image data control unit (100) that applies processing to an image that has been read into the system by an image reading unit (101); see fig. 1;

paragraphs [0052]-[0064]);

converting the image data into a signal driving the image forming apparatus and applying image processing to the signal necessitated along with the converting process (i.e. the image data control unit (100) also converts the data into serial or parallel data in order to be used by the image writing unit (104) to drive the output of the image writing unit. This unit interfaces with the image processing and reading units to apply the appropriate image compression/decompression, scaling and format conversion to the image data in order to make the data more suitable for the image writing unit for output processing; see fig. 1; paragraphs [0052]-[0102]); and

wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip (i.e. the image data control unit can also perform the supervision of the data since it monitors the input and output of data into itself and the input and output of the data in the reading and writing units. The image data control unit performs processing to the image data read and converts the data in order to make the data appropriate for the image writing unit. Therefore, the image data control unit performs the feature of the read and write image processing device. With the image data controller (203) acting as the image data control unit, the controller (203) communicates with both a serial and parallel bus. At different times, information is received from each bus and there is a device that performs the feature of selecting which bus to accept information from and to transmit information through. This performs the bus interface and bus selecting device feature. With all of these features

on the image data controller (203) then it is understood that since one component performs all these features, that one controller is one microprocessor which is comprised of one chip; see figs. 1,2 and 4; paragraphs [0052]-[0127]).

Therefore, in view of Oteki '429, it would have been obvious to one of ordinary skill at the time the invention was made to have the method steps of applying image processing to image data read by the image reading device, converting the image data into a signal driving the image forming apparatus and applying image processing to the signal necessitated along with the converting process and wherein at least the read image processing device, the write image processing device, the supervising device, the bus interface and the bus selecting device are arranged on a same chip in order to have the size of a processing circuit be reduced in an image processing apparatus (as stated in Oteki '429 paragraph [0024]).

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi '194 in view of Namizuka '643 (US Pat No 7038818).

Re claim 15: The teachings of Kobayashi '194 are disclosed above.

Kobayashi '194 discloses the image forming system according to claim 11, wherein said additionally attached expansion unit includes a first image memory configured to store image data (i.e. in the system of Kobayashi '194, image data is exchanged between both the external device and the image forming apparatus. With the exchange of this information, this information has to be stored at some location temporarily before it is sent over to the image forming apparatus. If a scanner is used, the image is

conventionally stored on the ROM and then transmitted to the apparatus; see paragraphs [0001]-[0008]).

However, Kobayashi '194 fails to teach said image forming apparatus includes an image memory connecting device configured to connect a second image memory configured to store image data, and said additionally attached expansion unit includes a storage control device configured to recognize and store image data having a same format as that to be stored in the second image memory.

However, this is well known in the art as evidenced by Namizuka '643. Namizuka '643 discloses said image forming apparatus includes an image memory connecting device configured to connect a second image memory configured to store image data (i.e. in the conventional system, the printer and fax control units have their own respective CPUs and memory. Also, in the image forming apparatus, the video control unit, considered as the memory connecting device, is connected to the memory control unit (108) which is configured to store image data; see figs. 1 and 2; paragraphs [0004]-[0013]), and said additionally attached expansion unit includes a storage control device configured to recognize and store image data having a same format as that to be stored in the second image memory (i.e. in an embodiment of Namizuka '643, an IMAC (12) is connected to an externally connected computer used to process the information that comes from the computer. Just like the conventional, the IMAC can be used with the FCU, the computer or the printer. The IMAC is used to manage memory access and other functions. When the memory control part within the IMAC is used to temporarily store information before the memory control part transmits the same

information temporarily stored in the memory control part to the memory (13) in the image forming apparatus. Since the image data does not change with any processing before being transmitted to the memory (13), the data transmitted to the memory (13) is the same as the data temporarily stored in the memory control part; see figs. 3-5; paragraphs [0070]-[0092]).

Therefore, in view of Namizuka '643, it would have been obvious to one of ordinary skill at the time the invention was made to have an image forming apparatus include an image memory connecting device configured to connect a second image memory configured to store image data, and said additionally attached expansion unit includes a storage control device configured to recognize and store image data having a same format as that to be stored in the second image memory in order to have a memory control part transmit data and store data in another memory device (as stated in Namizuka '643 paragraph [0092]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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